

ABSTRACT

A system and method for subsea drilling/completion. The system comprises a high-pressure riser extending from a semi-submersible platform to a subsea wellhead. A landing string extends along the insides of the riser, and has a surface blowout preventer and at least one subsea blowout preventer attached thereto. A tubing hanger running tool is run from the platform toward the wellhead. In one embodiment, hydraulic control for various functions of the tubing hanger running tool is communicated either through the tubing string or through the riser. In another embodiment, hydraulic control lines for the tubing hanger running tool extend from the platform to the tubing hanger running tool through an umbilical line, which may either run through the tubing string, inside the riser but outside the tubing string, or outside and alongside the riser. In an embodiment where the umbilical line runs inside the riser, a protective structure is provided to prevent damage to the umbilical line in the event that the subsea blowout preventer is deployed.

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